TEXAS A&M UNIVERSITY
Real Estate Center

Water Wise
Merging Ideas for Future Resources

Charles E. Gilliland
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Texans worry about water when it stops raining. Major water legislation can pass the legislature following droughts. When it rains again, the fervor for change ebbs. Following the record one-year drought in 1995-96, Senate Bill 1 in 1997 created a process to organize users statewide to craft a plan for the future of Texas water. That effort resulted in a statewide water plan that requires updates every five years.

Despite the recurrent nature of this process, scattered lonely voices frequently express concern about future water shortages, often roused by localized skirmishes over real or imagined threats to specific groups of users. Citizens can become part of the planning process and help prevent future water shortages. Understanding that process is the first step.

Consolidating Water Plans

The planning process relies on input from 16 Regional Water Planning Groups (RWPG), each gazing 50 years into the future. The Texas Water Development Board (TWDB) consolidates those local plans into a single plan for Texas. For a description of the process see "Water Planning and Groundwater Management" in the February 2016 issue of *Tierra Grande* and online at www.recenter.tamu.edu. Input from the state level comes from the TWDB in the form of technical assistance to the RWPGs and approval of each regional plan before incorporating it into the statewide plan. This results in a plan devised by RWPGs and focused on forecast needs of local water users, including those regulated by groundwater conservation districts (GCD).

The Takeaway

To address the future of Texas water availability, the state has a comprehensive plan that incorporates input from 16 regional water planning groups as well as feedback from private citizens.

On average, RWPGs have 22 voting members plus non-voting members. Voting members control the main functions of the RWPG as they each represent one

of 12 interest groups, including the public, counties, municipalities, industry, agriculture, environment, small business, electric-generating utilities, river authorities, water districts, water utilities, and groundwater management areas. Among other things, voting member duties require them to attend meetings, be informed, actively assist in developing a regional water plan, direct technical consultants, cooperate with other RWPGs, adopt a regional water plan by the deadline, and prioritize projects required by water management strategies (WMS) specified in the plan.

Non-voting members come from TWDB, Texas Department of Agriculture, Texas Parks and Wildlife, State Soil and Water Conservation Board, adjacent RWPGs, and holders of rights to large amounts of water with headquarters in a different RWPG. These members attend meetings to act on behalf of their specified entity while providing information to assist the voting membership. More information on regional water planning is at www.twdb.texas.gov/waterplanning/rwp/index.asp.

Each RWPG designates one political subdivision to administer and manage the planning process. This may be a river authority, council of government, municipality, or other political subdivision involved in the planning process. Administrators conduct business for RWPGs, including organizing meetings. They also enlist technical consultants who provide the modeling of expected supplies of groundwater and the demand projections underlying the plan. Technical consultants participate in RWPG meetings and provide data to TWDB.

TWDB oversees the entire process through project managers assigned to each RWPG. These liaisons ensure final regional plans meet legal requirements. They also help orient new members and provide technical guidance. TWDB provides financial assistance, drafts rules, and offers guidance to RWPGs. TWDB works with other state agencies prior to adopting final population and water demand projections. The board approves regional plans and incorporates them into a final, statewide plan.

Soliciting Public Feedback

The RWPGs schedule preplanning meetings. All RWPG meetings are open to the public, but these are specifically designed to elicit suggestions from the public. They must occur before technical work begins. Rules require RWPGs to establish a process enabling the public to help identify ways to ensure adequate future water supplies are available.

Following this meeting, work begins on projecting population, water demand, water availability, and existing water supplies. These inputs help form the official WMS that serves as the backbone of the water plan. After drafting the plan, each RWPG holds a public hearing to gather written comments on the initial plan. The RWPG then sends that plan to the TWDB and the public for review. The public has 60 days to comment, state or federal agencies 90 days, and the TWDB 120 days. This stage of the process includes notifying the TWDB of potential interregional conflicts between plans to allow a negotiated resolution.

State Plan Comes Together

Finally, an avalanche of electronic documents descends on TWDB in the form of final regional water plans. The deluge includes supporting data and documents. Each RWPG presents a prioritized listing of projects required to fulfill the envisioned WMS. At this stage, the TWDB consolidates the regional plans into the state water plan.

TWDB rules require each RWPG to include the following in its planning work.

- water conservation plans,
- drought management and drought contingency plans,
- water availability requirements in accordance with Texas Water code 35.019,
- Texas Clean Rivers Program,
- the U.S. Clean Water Act,
- approved GCD management plans,
- approved groundwater regulatory plans, and
- input from the public prior to and during the regional water-planning process

The list indicates that RWPGs lean heavily on local GCDs (see Maps 1 and 2) to produce their plans. Consensus desired future conditions (DFCs) devised by all GCDs in each groundwater management area were the measurable targets guiding GCDs' rulemaking. Withdrawal controls embodied in those rules sought to ensure aquifers would reach those DFCs. Threats that cast achievement of the DFCs into doubt call for GCDs to rethink their rules. This makes the GCDs and their rulemaking critical elements in the planning process.

Smoothing the Process

Obviously, the planning process involves complicated interactions among disparate groups of stakeholders. To smooth the process with more state-level coordination,

the 2019 legislature passed HB 807 creating an Interregional Planning Council with members appointed by the TWDB. The council from each RWPG will include one member appointed at "an appropriate time" in the five-year planning cycle. The act specifically states TWDB will consider the RWPGs' nominations when making council appointments.

HB 807 specifies three purposes for the council. First, it must improve the planning process by improving coordination among the RWPGs. In addition, the council should increase coordination between RWPGs and the TWDB to more efficiently achieve the state water-planning process goals and the water needs of the state as a whole.

Second, the council must promote discussions of water management strategies affecting several regional water-planning areas.

Third, the council will share best practices regarding operation of the planning process. To accomplish this, the council must hold at least one public hearing and report to the TWDB on its work.

'Law of the Biggest Pump'

This ongoing planning process indicates the state is indeed doing something to ensure adequate water supplies. The public has many opportunities to further those efforts. However, the persistence of the rule of capture threatens to undermine these measures, especially in scattered local situations. Specifically, the rule of capture applies in areas not covered by either the Edwards Aquifer Authority or a GCD.

Often described as "the law of the biggest pump," the rule of capture allows a landowner to pump water beneath his or her property. According to the decision in the Sipriano case, which challenged the rule of capture, where the rule of capture applies, landowners can pump as much water as they please if the pumping does not:

- maliciously drain a neighbor's water supply,
- deliberately waste water,
- negligently cause subsidence,
- come from a contaminated well, or
- involve trespassing to pump the water.

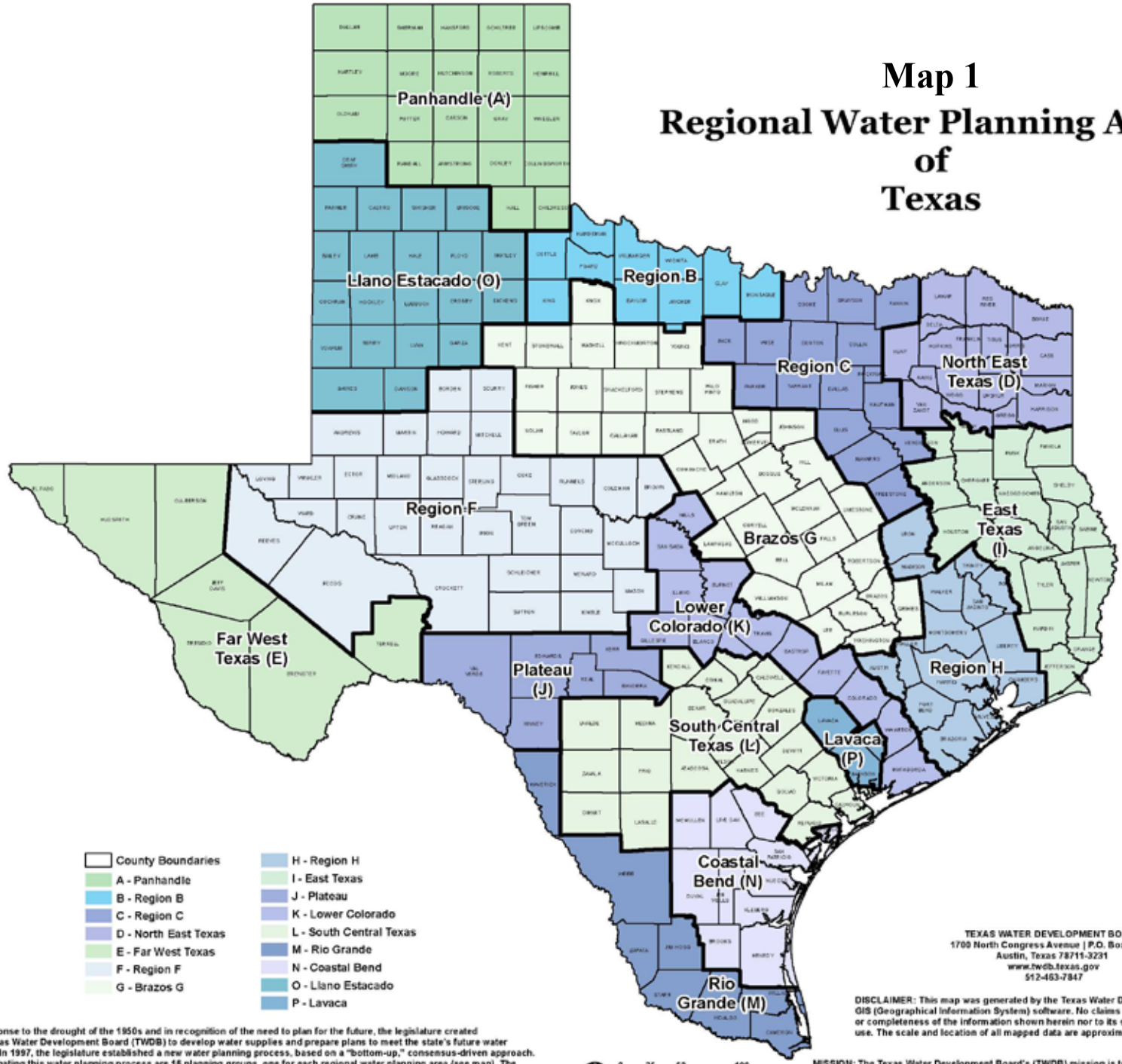
Thus, owners in locations where the rule of capture applies (see the white areas in Map 2) can legally pump all of the water they want ungoverned by rules and regulations.

Map 3 shows the Trinity Aquifer boundaries in relation to Texas counties. The waters underlie the I-35 corridor, supplying some of the most heavily populated counties in Texas. Map 2 reveals that densely populated Dallas and Williamson Counties lie over the aquifer and have no GCDs. They are rule-of-capture territory. That has led to a conflict between the Clearwater Underground Water Control District and Williamson County. Bell County users who have seen their wells go dry despite rules and regulations imposed by the district blame Williamson County developers for pumping from the Trinity, unregulated by a GCD. Rural residents in Bell County worry that uncontrolled developers will continue to drain the aquifer to supply their rapidly growing development, leaving individual residents without water from their existing wells. That kind of conflict has sporadically occurred along the Trinity in heavily populated areas.

A growing population means Texas will likely face more of these situations. Meanwhile, concerned citizens can help solve future water shortages by becoming involved in the planning process.

Dr. Gilliland (c-gilliland@tamu.edu) is a research economist with the Real Estate Center at Texas A&M University.

Map 1
Regional Water Planning Areas of Texas



TEXAS WATER DEVELOPMENT BOARD
1700 North Congress Avenue | P.O. Box 13231
Austin, Texas 78711-3231
www.twdb.texas.gov
512-463-7847

In response to the drought of the 1950s and in recognition of the need to plan for the future, the legislature created the Texas Water Development Board (TWDB) to develop water supplies and prepare plans to meet the state's future water needs. In 1997, the legislature established a new water planning process, based on a "bottom-up," consensus-driven approach. Coordinating this water planning process are 16 planning groups, one for each regional water planning area (see map). The planning groups, each made up of about 20 members, represent a variety of interests, including agriculture, industry, environment, public, municipalities, business, water districts, river authorities, water utilities, counties, and power generation.

MISSION: The Texas Water Development Board's (TWDB) mission is to provide leadership, planning, financial assistance, information, and education for the conservation and responsible development of water for Texas.

TNRIS

Texas Water Development Board

Groundwater Conservation Districts

1 High Plains UWCD No.1 - 9/29/1951
2 North Plains GCD - 1/2/1955
3 Panhandle GCD - 1/21/1956
4 Hudspeth County UWCD No. 1 - 10/5/1957
5 Real-Edwards C and R District - 5/30/1959
6 Evergreen UWCD -8/30/1965
7 Plateau UWC and Supply District - 3/4/1974
8 Harris-Galveston Subsidence District- 4/23/1975
9 Glasscock GCD - 8/22/1981
10 Hickory UWCD No. 1 - 8/14/1982
11 Irion County WCD - 8/2/1985
12 Permian Basin UWCD - 9/21/1985
13 Sutton County UWCD - 4/5/1986
14 Coke County UWCD - 11/4/1986
15 Mesquite GCD - 11/4/1986
16 Hill Country UWCD - 8/8/1987
17 Barton Springs/Edwards Aquifer CD - 8/13/1987
18 Lipan-Kickapoo WCD - 11/3/1987
19 Sterling County UWCD - 11/3/1987
20 Santa Rita UWCD - 8/19/1989
21 Fort Bend Subsidence District - 8/28/1989
22 Bandera County RA & GWD - 11/7/1989
23 Live Oak UWCD - 11/7/1989
24 Sandy Land UWCD - 11/7/1989
25 Saratoga UWCD - 11/7/1989
26 Mesa UWCD - 1/20/1990
27 Crockett County GCD - 1/26/1991
28 Medina County GCD - 8/26/1991
29 Headwaters UWCD - 11/5/1991
30 South Plains UWCD - 2/8/1992
31 Plum Creek CD - 5/1/1993
32 Uvalde County UWCD - 9/1/1993
33 Jeff Davis County UWCD - 11/2/1993
34 Gonzales County UWCD - 11/2/1994
35 Edwards Aquifer Authority - 7/28/1996
36 Garza County UWCD - 11/5/1996
37 Hemphill County UWCD - 11/4/1997
38 Wintergarden GCD - 1/17/1998
39 Culberson County GCD - 5/2/1998
40 Llano Estacado UWCD - 11/3/1998
41 Rolling Plains GCD - 1/26/1999
42 Menard County UWCD - 8/14/1999
43 Clearwater UWCD - 8/21/1999
44 Presidio County UWCD - 8/31/1999
45 Guadalupe County GCD - 11/14/1999
46 Bee GCD - 1/20/2001
47 Blanco-Pedernales GCD - 1/23/2001
48 Brewster County GCD - 11/6/2001
49 Coastal Bend GCD - 11/6/2001
50 Coastal Plains GCD - 11/6/2001
51 Fayette County GCD - 11/6/2001
52 Goliad County GCD - 11/6/2001
53 Lone Star GCD - 11/6/2001
54 McMullen GCD - 11/6/2001
55 Neches & Trinity Valleys GCD -11/6/2001
56 Pecan Valley GCD - 11/6/2001
57 Pineywoods GCD - 11/6/2001
58 Refugio GCD - 11/6/2001
59 Texana GCD - 11/6/2001
60 Kinney County GCD - 1/12/2002
61 Lone Wolf GCD - 2/2/2002
62 Kimble County GCD - 5/3/2002
63 Middle Trinity GCD - 5/4/2002
64 Bluebonnet GCD - 11/5/2002
65 Brazos Valley GCD - 11/5/2002
66 Clear Fork GCD - 11/5/2002
67 Cow Creek GCD - 11/5/2002
68 Lost Pines GCD - 11/5/2002
69 Mid-East Texas GCD - 11/5/2002
70 Middle Pecos GCD - 11/5/2002
71 Post Oak Savannah GCD - 11/5/2002
72 Red Sands GCD - 11/5/2002
73 Trinity Glen Rose GCD - 11/5/2002
74 Wes-Tex GCD - 11/5/2002
75 Gateway GCD - 5/3/2003
76 Hays Trinity GCD - 5/3/2003
77 Rusk County GCD - 6/5/2004
78 Kenedy County GCD - 11/2/2004
79 Southeast Texas GCD - 11/2/2004
80 Corpus Christi ASRCD - 6/17/2005
81 Victoria County GCD - 8/5/2005
82 Central Texas GCD - 9/24/2005
83 Brazoria County GCD - 11/8/2005
84 Lower Trinity GCD - 11/7/2006
85 San Patricio County GCD - 5/12/2007
86 Northern Trinity GCD - 5/15/2007
87 Colorado County GCD - 11/6/2007
88 Panola County GCD - 11/6/2007
89 Starr County GCD - 11/6/2007
90 Upper Trinity GCD - 11/6/2007
91 Southern Trinity GCD - 6/19/2009
92 Duval County GCD - 7/25/2009
93 Prairielands GCD - 9/1/2009
94 Red River GCD - 9/1/2009
95 Brush Country GCD - 11/3/2009
96 North Texas GCD - 12/1/2009
97 Terrell County GCD - 11/6/2012
98 Calhoun County GCD - 11/4/2014
99 Comal Trinity GCD - 6/17/2015
100 Reeves County GCD - 11/3/2015

Pending Confirmation

A - Aransas County GCD
B- Southwestern Travis County GCD

Map 2

Texas Groundwater Conservation Districts (November 2019)

GCD Established by law and election
GCD Created, but pending local confirmation
0 15 30 60 90 120 Miles

Date indicates date established by law or by election.

ASRCD - Aquifer Storage and Recovery Conservation District
CD - Conservation District
CRD - Conservation and Reclamation District
GCD - Groundwater Conservation District
RA & GWD - River Authority & Ground Water District
UFWCD - Underground and Fresh Water Conservation District
UWCSD - Underground Water Conservation & Supply District
UWCD - Underground Water Conservation District
WCD - Water Conservation District
WD - Water District

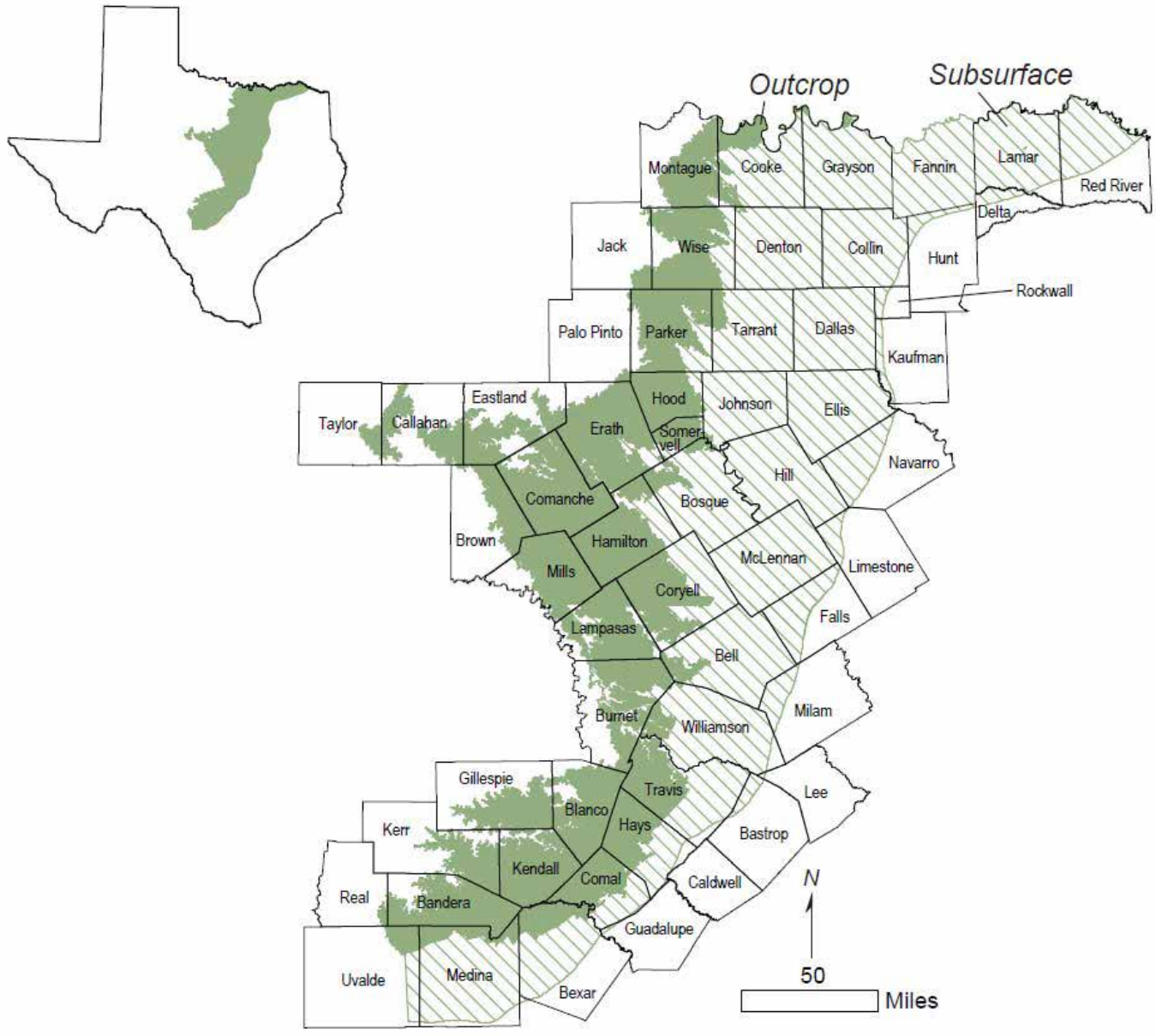
Texas Commission on Environmental Quality

TCEQ

This map was generated by the Water Availability Division of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact the Water Availability Division at (512) 239-4691.

Map printed November 1, 2019.

Map 3
Trinity Aquifer



Source: Clearwater Underground Water Conservation District